

Patent Abstracts of Japan

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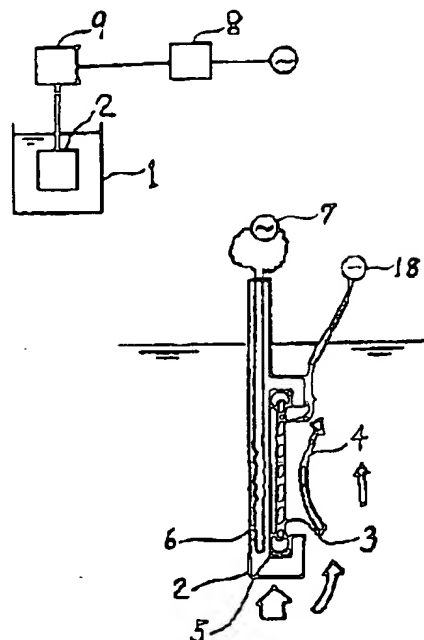
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APPLICANT : EBARA CORP;

INVENTOR : OHIRA TAKEMASA;

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TITLE : METHOD AND DEVICE FOR PLATING
 SEMICONDUCTOR WAFER



ABSTRACT : PURPOSE: To remove air bubbles and to prevent the resticking of a wafer by applying energy to the air bubbles sticking to the fine pores of the wafer in a plating liquid.

CONSTITUTION: The wafer 3 and the part near the wafer 3 are heated up in the plating liquid by a heater 6, etc., installed within a wafer jig 2 to apply desorbing force to the air bubbles in the micropores or grooves of the wafer 3. The desorbed air bubbles flow upward in a plating cell and are carried over to the outside of the plating cell without resticking to the wafer 3 by the temp. difference convection, buoyancy, etc., generated near the wafer 3. Pulses or continuous waves are generated by a vibration generator 8 and the wafer jig 2 is excited within the plating cell 1 by a vibration exciter 9 connected thereto. The air bubbles sticking in the microgrooves of the wafer are removed by the application of such microvibrations. The air bubbles do not exist any longer on the surfaces to be plated in the microgrooves and always the fresh plating liquid is supplied thereto. The stable plating is thus expected.

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